Louisiana
Totally Interoperable Environment
(LATIE)
After the Storms

Katrina/Rita Communication Losses

- Commercial telephone switch failed, causing failure of emergency telephone and wireless systems.
- 911 systems failed due to loss of commercial switch.
- State system suffered equipment loss from flooding.
- Local systems suffered loss of equipment, power, towers.

Remediation

- Re-engineered communications paths.
- Re-established backhaul to commercial network with satellite and microwave.
- Added tower site on top of Pan American building by helicopter.
- Added capacity by borrowing and relocating repeaters.
- Moved some local communications onto state system.
- Took 911 calls for out of service local systems – 22,000 of them and dispatched every call.

Communications Interoperability Defined

- The US Department of Homeland Security's SAFECOM Project Defines Communications Interoperability as:
  - The ability of public safety emergency responders to work seamlessly with other systems or products without any special effort.

FEMA Support

- Approved $15.9M Infrastructure Replacement and Augmentation
- Authorized $5M purchase of Radio Equipment For UASI Region 1. This was Transferred to St. Bernard and Plaquemines Parishes

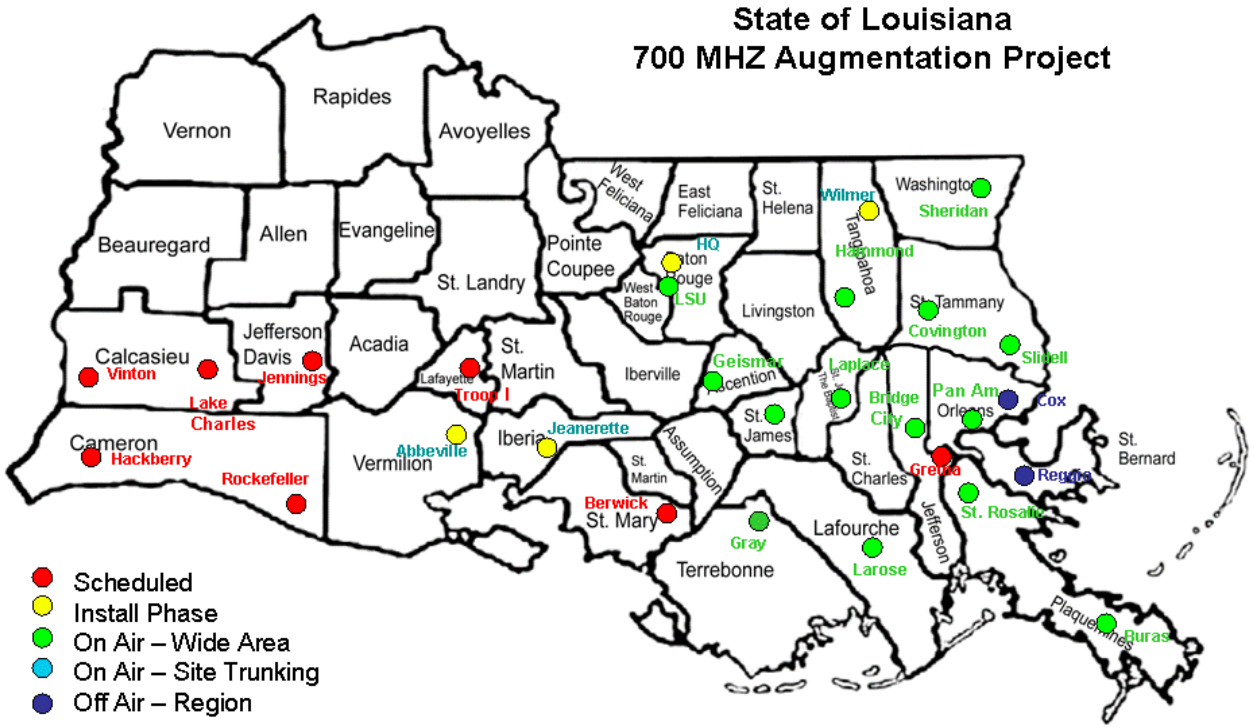
700 MHz Network Expansion

- Expansion of 700 MHz System to Southwest Louisiana Through Remediation of 7 Existing 800 MHz Sites and 2 Additional Sites
  - $2.8 Million in State Funds
  - Target Completion Date of July 31, 2006
- DOTD for Microwave Connection
  - LaPlace Site / Troop B Site
  - Crescent City Connection Site / Gretna Site
- Coordinating with Board of Regents on LONI Project for Fiber Connectivity Between State and Reg 1 Switches

Hurricane Katrina Efforts

NETWORK HIGHLIGHTS

- APCO 25 Network
- 28 Tower Sites
  - Impacted Parishes
- Master Site
  - DPS compound
- 700 & 800 MHz capable
- Can add 100+ sites
- “Portable” Coverage



Emergency Support Function 2 Communications

- **Coordination Among ESF-2 Primary Agencies to Produce a Comprehensive Communications Plan**
  - GOHSEP, LANG, and LSP
  - ESF 2 Primary agencies will operate a response cell during critical incidents
- **Communications Strategy**
  - Shared 800 MHz / 700 MHz Network
  - Layers of Redundancy
  - Increased Capacity
  - Greater Interoperability Through Bridging Equipment

Emergency Support Function 2 Communications

- Primary ESF-2 Agencies will Maintain a 24-Hour Operations Cell During Critical Incidents

Levels of Interoperability

	Method	Fit
LEVEL 6 Standards-Based Shared Systems	Standards-Based Shared Systems	**Best Long-Term Solution**
LEVEL 5 System-Specific Roaming	System-Specific Roaming	**Full-featured, Wide Area**
LEVEL 4 Gateway (Console Patch)	Gateways	**Short-Term System Modification**
LEVEL 3 Mutual Aid Channels	Mutual Aid Channels	**Simple Short-Term Solutions**
LEVEL 2 Talkaround	Talkaround	
LEVEL 1 Swap Radios	Swap Radios	

Easily deployed

↑

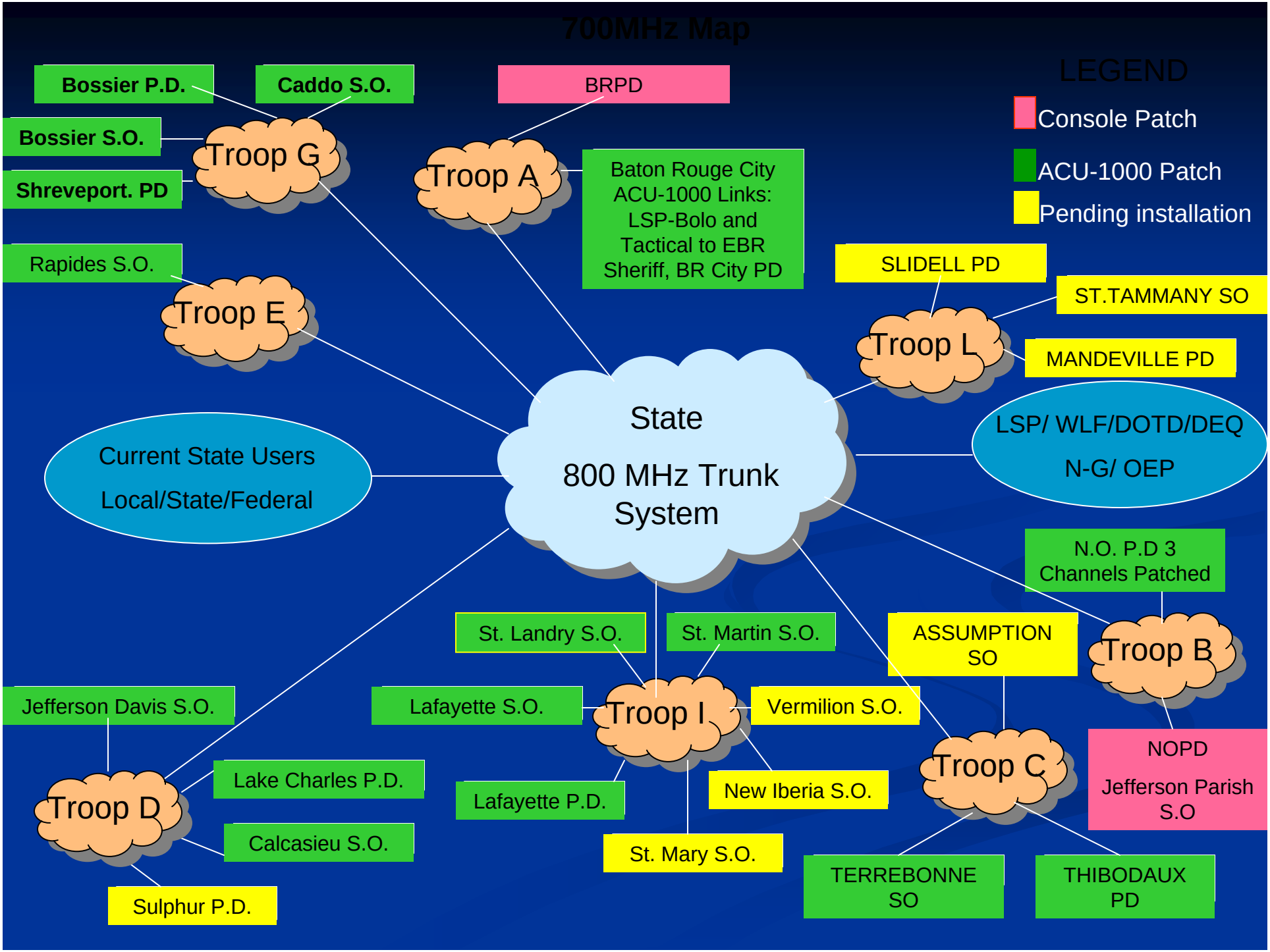
Time-consuming

700 MHz System Redundancy of Path and Technology

- Satellite Connections to be Installed at Key Troops
  - Troop B
  - Troop C
  - Troop D
  - Troop I
  - Troop L

Communication Acquisitions for Redundancy and Interoperability

- LSP has Purchased 8 ACU-1000 Devices
  - Six of These have been Installed at Troops
  - Two are Portable and can be Deployed where Needed
- As LSP and LANG Deploy New 700 MHz Radios, the 800 MHz Radios Collected from Personnel can be Distributed to other First Responders
- Pool of Computer “Aircards” and Blackberry Devices for Deployment During Critical Incidents


700MHz Map
LEGEND
Console Patch
ACU-1000 Patch
Pending installation
Bossier P.D.
Caddo S.O.
Bossier S.O.
Shreveport. PD
Troop G
BRPD
Troop A
Baton Rouge City
ACU-1000 Links:
LSP-Bolo and
Tactical to EBR
Sheriff, BR City PD
Rapides S.O.
Troop E
SLIDELL PD
ST.TAMMANY SO
Troop L
MANDEVILLE PD
State
800 MHz Trunk
System
Current State Users
Local/State/Federal
LSP/ WLF/DOTD/DEQ
N-G/ OEP
N.O. P.D 3
Channels Patched
Troop B
St. Landry S.O.
St. Martin S.O.
ASSUMPTION
SO
Jefferson Davis S.O.
Lafayette S.O.
Troop I
Vermilion S.O.
Troop C
NOPD
Jefferson Parish
S.O
Troop D
Lake Charles P.D.
Lafayette P.D.
New Iberia S.O.
Calcasieu S.O.
St. Mary S.O.
TERREBONNE
SO
THIBODAUX
PD
Sulphur P.D.

Communication Restoration and Augmentation Acquisitions

- Two LSP Portable 700 MHz / 800 MHz Communications Trailers
  - Estimated Deployment Date of July 31, 2006
  - 700 MHz / 800 MHz Repeaters
  - Satellite Connectivity
  - Computer Network Connectivity / Laptop Computers
  - VOIP Telephone Connectivity
  - Bridging / Gateway Equipment
  - On-board Generators

Communication Acquisitions by GOHSEP

- Acquisition of Similar Communications Trailers by GOHSEP will Enhance Connectivity with Local Officials
  - Three Rapid Communications Systems Capable of Providing VOIP, Computer Access and Interoperable Radio Communications
  - Three PacStar 5500 Communication Systems to Provide Telephone, Computer and Internet Access Via Satellite
  - Telephone Redundancy Via Mitsubishi Satellite Units In Selected Parishes, Wireless Access Priority for Cellular Telephones and FEMA Region VI Satellite System at State EOC

Additional Significant Achievements for Communications Interoperability

- Governor Blanco established Executive Order KBB-2006-17 – Statewide Interoperable Communications Executive Committee
- Statewide Talkgroup Development
- Joint Local and State Request for Federal Appropriations for Infrastructure and Subscriber Units
- Combined Local and State Efforts in Utilization of Homeland Security Grant Funding

800/700 MHz Talkgroups

800 MHz Talkgroups

Headquarters	A-Dispatch-1
DPS-Police-1	A-Dispatch-2
DPS-Police-2	A-Secure-1
DPS-Police-3	A-Secure-2
Tess-1	A-Car/Car
Tess-2	A-Gaming
Statewide-1	A-CIB/NARC
Statewide-2	A-CIB/Gen
Special-1	A-Exec/Sec
Special-2	A-DPS/Oth (Bolo)
Special-3	A-Lsp-1 (Tactical)
Special-4	A-Lsp-2
Special-5	A-Coord/Call
Special-6	A-Coord/Talk-1
Special-7	A-Coord/Talk-2
Special-8	A-Regroup

700 MHz Talkgroups

Headquarters	A-Dispatch-1
DPS-Police-1	A-Dispatch-2
DPS-Police-2	A-Secure-1
DPS-Police-3	A-Secure-2
Tess-1	A-Car/Car
Tess-2	A-Gaming
Statewide-1	A-CIB/Narc
Statewide-2	A-CIB/Gen
Special-1	A-Exec/Sec
Special-2	A-BOLO
Special-3	A-Tactical
Special-4	A-Lsp-2
Special-5	A-Coord/Call
Special-6	A-Coord/Talk-1
Special-7	A-Coord/Talk-2
Special-8	A-Regroup

Interoperability Talkgroups

- Statewide - (Used when needed in Large Coverage areas)
- Region Wide - (Used in Local Troop Coverage areas)
- Parish Wide - (Used in parish areas)

Interoperability Talkgroups

- Statewide Channels
  - Statewide 1
  - Statewide 2
  - Statewide 3

Interoperability Talkgroups

- Region Wide
  - A-Bolo
  - A-Tactical
  - A-Coord/Call
  - A-Coord/Talk-1
  - A-Coord/Talk-2
  - B-Bolo
  - B-Tactical
  - B-Coord/Call
  - B-Coord/Talk-1
  - B-Coord/Talk-2

Interoperability Talkgroups

- Parish Wide
  - ORLNS-1 EBR-1
  - ORLNS-2 EBR-2
  - ORLNS-3 EBR-3
  - ORLNS-4 EBR-4

Next Steps

- Continue to Build Partnerships with all Members of Emergency Response Community
- Shared Governance Agreement for Users of System, Users will have Input into Decisions
- Shared Resources Model
- Continued and Joint Effort to Secure Federal Funding for Completion of LATIE Project

Next Steps

- Expand 700 MHz System Across Coastal Louisiana
  - Orleans
    Jefferson
    Tangipahoa
    Lafourche
    Assumption
    Allen
    Cameron
    Lafayette
    St. Mary
    St. Bernard
    St Tammany
    St. John
    Terrebonne
    Ascension
    Beauregard
    Evangeline
    St. Landry
    Jefferson Davis
    Plaquemines
    Washington
    St. Charles
    St. James
    Acadia
    Calcasieu
    Iberia
    St. Martin
    Vermillion
    - **Upgrade 28 Sites with 4 Repeaters**
    - **32 Microwave Connections**

Next Steps

- In Building Enhanced Coverage
  - Superdome
  - Cajundome
  - Lake Charles Civic Center
- Two Additional Mobile Communication Towers in Southwest Louisiana

Next Steps

- Elevation of Hackberry and Buras Tower Facilities
- Mobile Communications Trailer with Satellite Backhaul and Full Motion Video Connectivity to Emergency Operations Center
- Twelve Cellular on Wheels (COW)
- Portable Microwave Systems

Next Steps

- State Subscriber Units

Item	Units	Unit Price	Total Cost
Console Stations	28	$131,293	$3,676,204
Portables	1,648	$2,200	$3,625,600
Mobiles	5	$2,200	$11,000
Control Stations	48	$4,000	$192,000
Total			**$7,504,804**

Next Steps

- Local Subscriber Units for SW LA

Item	Units	Unit Price	Total Cost
Console Stations	204	$131,293	$26,783,772
Portables	21,971	$2,200	$48,336,200
Mobiles	0	$2,200	$0
Control Stations	654	$4,000	$2,616,000
Total			**$77,735,972**

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